

BOTANY.—*A new grass from Texas.*¹ AGNES CHASE, Bureau of Plant Industry.

Within the last year four previously unknown grasses were discovered in Texas. Recently another, not closely related to any other North American species, was sent to the Grass Herbarium by Mr. J. F. Combs, county agricultural agent, Beaumont, Texas. This grass has been found in three places only, all in Jefferson County, eastern Texas. Besides these new species several grasses not previously known from the United States have been found in Texas.

Paspalum alnum Chase

Planta perennis caespitosa; culmi compressi, simplices, 30–50 cm. alti; vaginae carinatae glabrae; laminae 5–17 cm. longae, 2–3 mm. latae, basi hirsutae; racemi 2–3, approximati, 5–9 cm. longi; rhachis 1 mm. lata; spiculae solitariae, 3 mm. longae, 1.8–2 mm. latae, glabrae; gluma 5-nervis; lemma 5-nerve.

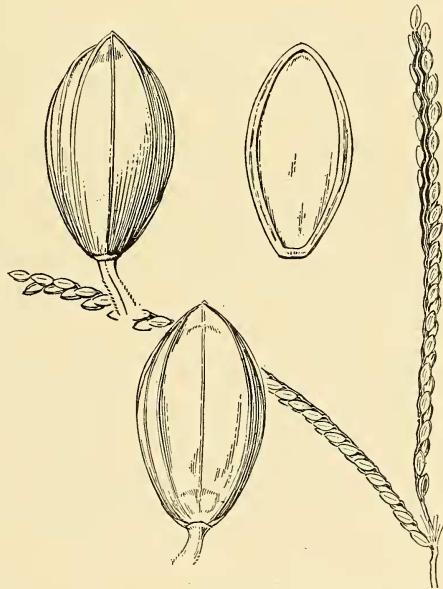


Fig. 1.—*Paspalum alnum*. Inflorescence, natural size; two views of spikelet and one of fruit $\times 10$ dia.

A densely tufted perennial; culms ascending to spreading, simple, 30 to 50 cm. tall, flattened, glabrous; leaves crowded toward the base; sheaths keeled, glabrous, the lower overlapping; ligule pale, membranaceous, about 1.5 mm. long; blades flat, rather firm, 5 to 17 cm. long (the uppermost reduced), 2 to 3 mm. wide, long-hirsute on the upper surface at base, papillose-

¹ Received November 8, 1932.

hirsute on the lower surface toward the ends, usually with a few hairs on the upper surface, the margins stiffly ciliate toward base; racemes commonly 2, sometimes 3, approximate (the common axis 5 to 20 mm. long), ascending, often somewhat recurved, 5 to 9 cm. long; rachis flexuous, 1 mm. wide, with a narrow winged margin, glabrous, the margin and midvein above scabrous; spikelets on minute flat pedicels, solitary, scarcely imbricate, 3 mm. long, 1.8 to 2 mm. wide, obovate-elliptic, glabrous; glume and sterile lemma equal, 5-nerved, the lemma slightly concave and sometimes faintly fluted; fruit slightly smaller than the spikelet, smooth and shining.

Type U. S. National Herbarium no. 1,535,768, collected on fine sandy and silty clay loam, near Beaumont, Jefferson County, Texas, September 8, 1932 by J. F. Combs.

This very distinct species belongs in the *Notata* group but is not closely allied to any of its five North American species.

Mr. Combs writes that the species is found only on the Lake Charles soils, derived from sedimentary deposits in the Coastal Plain, and that it is an excellent forage grass, hence the specific name, *almum*, nourishing.

BOTANY.—*Morphological diversity among fungi capturing and destroying nematodes.*¹ CHARLES DRECHSLER, Bureau of Plant Industry.

Nematodes mostly of the genera *Rhabditis* and *Diplogaster* infesting agar plate cultures prepared from plantings of diseased rootlets or other decaying plant materials have been found destroyed often in such enormous numbers that the numerous heaped masses of their remains became visible to the naked eye as scabby superficial deposits. Among these fungi the one (Fig. 1, A) discussed by Zopf² as *Arthrobotrys oligospora* Fres. was often encountered. Three species evidently closely related to it and similarly having 1-septate conidia—one (Fig. 2, A) with the markedly smaller spores divided into somewhat less unequal cells and borne usually in one or two whorls on minute sterigmata; another (Fig. 3, A) bearing longer conidia with characteristically tapering basal cells, usually in a single terminal whorl likewise on sterigmata distributed over a recognizable enlargement; and a third (Fig. 4, A) with straight or slightly curved elongated ellipsoidal conidia borne in looser capitate arrangement on a terminal head of stubby branches—showed close similarity to *A. oligospora* also in manner of capture and killing. The animal was caught in one or more of the anastomosing hyphal loops (Figs. 2, B; 3, B) produced abundantly on the surface of the substratum by all

¹ Received February 10, 1933.

² Nova Acta K. Leop.-Carol. Deut. Acad. Naturf. 52: 314-341. 1888.